LISTING OF CLAIMS:

Claims 1 to 25. (Canceled).

26. (Previously Presented) A measuring device for at least one of (a) measuring a distance between the measuring device and at least one object and (b) measuring a speed difference between the measuring device and the at least one object, comprising:

an emission device adapted to send a transmission signal that includes at least two signal portion sequences, each of a first signal portion sequence and a second signal portion sequence including at least two temporally alternating signal portions, at least two signal portions of a signal portion sequence differing in frequency by one differential frequency, wherein the differential frequency of the first signal portion sequence differing from the differential frequency of the second signal portion sequence.

27. (Previously Presented) The measuring device according to claim 26, wherein the measuring device is adapted to be arranged in a motor vehicle.

28. (Previously Presented) The measuring device according to claim 26, further comprising a reception device adapted to receive a reflection signal of the transmission signal reflected by the at least one object.

29. (Previously Presented) The measuring device according to claim 28, further comprising a mixer adapted to mix the first signal portion sequence with a portion of the first signal portion sequence of the reflection signal reflected by the at least one object to form a first mixed signal.

30. (Previously Presented) The measuring device according to claim 29, further comprising an evaluation device adapted to ascertain one of (a) a measured frequency and (b) frequencies of the first mixed signal.

31. (Previously Presented) The measuring device according to claim 30, wherein the evaluation device is adapted to determine the distance between the

measuring device and the at least one object as a function of the one of (a) the measured frequency and (b) the frequencies of the first mixed signal.

32. (Previously Presented) The measuring device according to claim 30, the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of the one of (a) the measured frequency and (b) the frequencies of the first mixed signal.

33. (Previously Presented) The measuring device according to claim 29, wherein the mixer is adapted to mix the second signal portion sequence with a portion of the second signal portion sequence of the reflection signal reflected by the at least one object to form a second mixed signal.

34. (Previously Presented) The measuring device according to claim 33, wherein the evaluation device is adapted to ascertain the one of (a) a measured frequency and (b) frequencies of the second mixed signal.

35. (Previously Presented) The measuring device according to claim 34, wherein the evaluation device is adapted to determine the distance between the measuring device and the at least one object as a function of the one of (a) the measured frequency and (b) the frequencies of the first mixed signal and of a dominating frequency of the second mixed signal.

36. (Previously Presented) The measuring device according to claim 34, wherein the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of the one of (a) the measured frequency and (b) the frequencies of the first mixed signal and of the one of (a) the measured frequency and (b) the frequencies of the second mixed signal.

37. (Previously Presented) The measuring device according to claim 33, wherein the evaluation device is adapted to determine a difference between a phase of the first mixed signal and a phase of the second mixed signal.

38. (Previously Presented) The measuring device according to claim 37, wherein the evaluation device is adapted to determine the distance between the measuring device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal.

39. (Previously Presented) The measuring device according to claim 37, wherein the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal.

40. (Previously Presented) A method for at least one of (a) measuring a distance between an emission device and at least one object and (b) measuring a speed difference between the emission device and the at least one object, comprising:

sending a transmission signal by the emission device including at least two signal portion sequences, each of a first signal portion sequence and a second signal portion sequence including at least two temporally alternating signal portions, at least two signal portions of a signal portion sequence differing in frequency by a differential frequency, the differential frequency of the first signal portion sequence differing from the differential frequency of the second signal portion sequence.

41. (Previously Presented) The method according to claim 40, further comprising receiving a reflection signal of the transmission signal reflected by the at least one object.

42. (Previously Presented) The method according to claim 41, further comprising mixing the first signal portion sequence with a portion of the first signal portion sequence of the reflection signal reflected by the at least one object to form a first mixed signal.

43. (Previously Presented) The method according to claim 42, further comprising ascertaining a dominating frequency of the first mixed signal.

44. (Previously Presented) The method according to claim 43, further comprising determining the distance between the emission device and the at least one object as a function of the dominating frequency of the first mixed signal.

45. (Previously Presented) The method according to claim 43, further comprising determining the speed difference between the emission device and the at least one object as a function of the dominating frequency of the first mixed signal.

46. (Previously Presented) The method according to claim 41, further comprising:

mixing the second signal portion sequence with a portion of the second signal portion sequence of the reflection signal reflected by the at least one object to form a second mixed signal; and

ascertaining a dominating frequency of the second mixed signal.

47. (Previously Presented) The method according to claim 46, further comprising determining the distance between the emission device and the at least one object as a function of a dominating frequency of the first mixed signal and the dominating frequency of the second mixed signal.

48. (Previously Presented) The method according to claim 46, further comprising determining the speed difference between the emission device and the at least one object as a function of a dominating frequency of the first mixed signal and the dominating frequency of the second mixed signal.

49. (Previously Presented) The method according to claim 46, further comprising determining a difference between a phase of the first mixed signal and a phase of the second mixed signal.

50. (Previously Presented) The method according to claim 49, further comprising determining the distance between the emission device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal.

51. (Previously Presented) The method according to claim 49, further comprising determining the speed difference between the emission device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal.

52. (Previously Presented) The method according to claim 40, wherein the emission device is arranged in a motor vehicle.